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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/623,051	07/18/2003	Gunther Michael	032301.0901	3961

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1230 PEACHTREE STREET, N.E.  
ATLANTA, GA 30307-3592

EXAMINER
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METZMAIER, DANIEL S

ART UNIT	PAPER NUMBER
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1712

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	01/11/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

<b>Office Action Summary</b>	Application No. 10/623,051	Applicant(s) MICHAEL ET AL.	
	Examiner Daniel S. Metzmaier	Art Unit 1712	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 16 March 2006.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1,2,4,5 and 10-12 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,2,4, and 10-12 is/are rejected.
- 7) ☒ Claim(s) 5 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |                                                                                                                        |                                                                                         |
|------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                                                       | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____                                                |

### **DETAILED ACTION**

Claims 1-2, 4-5, and 10-12 are pending.

#### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on November 29, 2006 has been entered.

#### ***Claim interpretation***

2. Claims 1-2 and 4 are directed to a hydrophobic, pyrogenically produced silica. Claim 10 is directed to a dispersion of hydrophobic, pyrogenically produced silica produced by the process of claim 5. Claims 1-2, 4, 10, and 12 are directed to compositions drafted in product-by-process format. For products drafted in product-by-process format, the determination of patentability is based on the product itself. Please see MPEP 2113.

Claims 5 and 11 are directed to processes for the production of hydrophobic, pyrogenically produced silica and methods of making a dispersion of hydrophobic, pyrogenically produced silica.

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***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action.

Paragraphs (e) are included as they pertain to Hartmann et al relied on below:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

6. Claims 1-2, 4, 10, and 11-12 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over anticipated by Degussa

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AG, EP 0 808 880 A2 (hereafter Degussa), as evidenced by Hartmann et al, US 5,959,005<sup>1</sup>. Hartmann et al is a patent family member of Degussa '880 and is used as translation evidence of the Degussa '880 disclosure. The citations refer to those set forth in Hartmann et al but the disclosure are considered to be the same or substantially the same.

Hartmann et al and Degussa (example) disclose the treatment of Aerosil 200, a pyrogenically produced silica produced by Degussa AG, was hydrophobically surface treated with hexamethyldisilazane followed by being compressed mechanically. Said hydrophobic silica is disclosed as having a tamped density of between 50 and 300 which 188 grams/liter exemplified.

Hartmann et al and Degussa (column 1, lines 47 et seq) disclose the use of the silica in low viscosity liquid systems that would require the formation of a dispersion as claimed.

While applicants attach an excerpt of a document in German in their preliminary remarks (filed March 12, 2004) and assert ball milling destroys the silica aggregate structure and the thickening effect is no further available. (1) Initially, the document cannot be properly evaluated as it is not in the English language and an English language equivalent or English language translation has not been provided. (2) The claims do not define the structure or the thickening effect and it has not been shown that the instant methods necessarily result in a different product. The claims also do not

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<sup>1</sup> Degussa has a publication date of 26 November 1997 and qualifies as prior art under 35 USC 102(b) whereas Hartmann et al qualifies as prior art under 35 USC 102(e).

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exclude further milling. (3) It has furthermore not been shown the instant compositions are not made by the prior art process employing vertical ball mill compaction.

To the extent the Hartmann et al and Degussa products differ from the claims in the structure and/or properties, some variation of the structure and/or properties would have been expected from batch to batch as an obvious variation contemplated in the Hartmann et al and Degussa references. Said difference has not been shown to be a patentable difference. Attention is directed to MPEP 2113.

Claim 11 is implicitly disclosed for the Hartmann et al and Degussa disclosed use of the materials as additives in silicone rubber systems, adhesives, molding compounds, jointing compounds, paints, gels, liquid plastic systems among others.

7. Claims 1-2, 4, 10, and 11-12 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over anticipated by Nippon Aerojiru KK, JP 06-087609, as evidenced by Machine Translation (Pattera Instant MT Machine Translation, Date of Translation unavailable). Nippon Aerojiru KK ([0005] and examples) discloses hydrophobic pyrogenic silica having densities of 80-300 g/l and ([0008] and examples, particularly example 3) having been reacted with halogen free silanes including trimethylsilane ethoxide or trimethylsilane methoxide.

While applicants attach an excerpt of a document in German in their preliminary remarks (filed March 12, 2004) and assert ball milling destroys the silica aggregate structure and the thickening effect is no further available. (1) Initially, the document cannot be properly evaluated as it is not in the English language and an English language equivalent or English language translation has not been provided. (2) The

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claims do not define the structure or the thickening effect and it has not been shown that the instant methods necessarily result in a different product. The claims also do not exclude further milling. (3) It has furthermore not been shown the instant compositions are not made by the prior art process employing vertical ball mill compaction.

To the extent the Nippon Aerojiru KK products differ from the claims in the structure and/or properties, some variation of the structure and/or properties would have been expected from batch to batch as an obvious variation contemplated in the Nippon Aerojiru KK reference. Said difference has not been shown to be a patentable difference. Attention is directed to MPEP 2113.

Claim 11 is implicitly disclosed for the Nippon Aerojiru KK disclosed use of the materials as additives in silicone oil to determine .

***Allowable Subject Matter***

8. Claim 5 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

***Response to Arguments***

9. Applicant's arguments filed November 29, 2006 have been fully considered but they are not persuasive.

10. The rejection of claim 5 under 35 U.S.C. 103(a) as being unpatentable over Degussa AG, EP 0 808 880 A2 (hereafter Degussa), as evidenced by Hartmann et al, US 5,959,005, or Nippon Aerojiru KK, JP 06-087609, as evidenced by Machine Translation (Pattera Instant MT Machine Translation, Date of Translation unavailable),

each optionally further in view of Klinge et al., US 4,877,595<sup>2</sup> or the Reinhardt et al, US 3,860,682, has been **withdrawn**.

11. Applicants' (pages 5 through 9) arguments are not commensurate in scope with the claims, which include product-by-process format claims. Applicants have not shown the process limitations to necessarily impart product distinctions.

Furthermore, attorney's arguments cannot take the place of evidence in the record. *In re DeBlauwe*, 736 F.2d 699, 705, 222 U.S.P.Q. 191, 196 (Fed. Cir. 1984). The burden of proving unexpected results rests on the party, which asserts them. In proving such results, it is not enough just to show that certain results are obtained. The results to be probative of nonobviousness must be shown to have been unexpected to the skilled worker in the art. Moreover, it is axiomatic that evidence presented to rebut a *prima facie* case of obviousness must be commensurate in scope with the claims the evidence is offered to support.

Furthermore, applicants state at page 3, lines 16 et seq, that the "viscosity also exhibits no clear systematic dependency upon tamped density". Tamped density is clearly related to compacting.

Lastly and while the amendments and arguments limiting the processes to "consisting of" transitional language is probative from the methods of making, said limitations and arguments are not probative for product-by-process claims. The products are examined based on the products formed. Also, the claims do not recite

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<sup>2</sup> Klinge et al., US 4,877,595, is a patent family member of EP 0 280 851 B1 instantly disclosed and employed by applicants as a compressing method.



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limitations regarding thickening or the degree of aggregation. Some aggregation would be expected as has not been shown to distinguish the claims.

12. Applicants assert the Nippon reference employs milling, which the present invention does not. Regarding the product claims, said alleged difference has not been shown to impart patentability to the products as claimed. Furthermore, the claims employ open language, i.e., "comprising", and therefore would not exclude the milling step that does not only result in compacting the silica.

13. Applicants Declaration is an opinion declaration, which is self serving. Said declaration provides no evidentiary data to support the conclusions. See MPEP 2113: "Once the examiner provides a rationale tending to show that the claimed product appears to be the same or similar to that of the prior art, although produced by a different process, the burden shifts to applicant to come forward with evidence establishing an unobvious difference between the claimed product and the prior art product. In re Marosi, 710 F.2d 798, 802, 218 USPQ 289, 292 (Fed. Cir. 1983)." Applicants have not met their burden.

14. Applicants' (page 7) arguments regarding the dispersion stability has not been deemed persuasive since the claims do not define any degree of stability and applicants have not shown the process produces unexpectedly results in said compositions claimed.


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**Conclusion**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Daniel S. Metzmaier whose telephone number is (571) 272-1089. The examiner can normally be reached on 9:00 AM to 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Randy P. Gulakowski can be reached on (571) 272-1302. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Daniel S. Metzmaier  
Primary Examiner  
Art Unit 1712

DSM